



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/854,563      | 05/15/2001  | Tetsunobu Kochi      | 35.15357            | 8125             |

5514 7590 08/04/2004

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

SELBY, GEVELL V

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2615

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/854,563

Applicant(s)

KOCHI, TETSUNOBU

Examiner

Gevell Selby

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 14 is/are rejected.
- 7) ☒ Claim(s) 4-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Endo et al., US 5,965,872.**

Endo et al., US 5,965,872, discloses a solid-state image pickup element (see figure 7) comprising:

a plurality of pixel blocks each having a plurality of photoelectric conversion elements (see column 10, lines 2-4), a plurality of transfer switches (TFTs) for transferring signals from said respective photoelectric conversion elements (see column 9, lines 49-52), and a common amplifier for receiving signals from said plurality of transfer switches (see fig. 7, element Amp and column 10, lines 6-10); and

a scanning circuit (see fig. 7, element SR1) for outputting a scanning clock for each pixel block (see column 10, lines 5-6).

Art Unit: 2615

In regard to claim 2, Endo et al., US 5,965,872, discloses an element according to claim 1, wherein said scanning circuit includes a shift register (see fig. 7, element SR1 and column 10, lines 5-6).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al., US 5,965,872, in view of Uno, US 5,619,262.**

In regard to claim 3, Endo et al., US 5,965,872, discloses the element according to claim 1. The Endo reference does not disclose that the scanning circuit includes a decoder.

Uno, US 5,619,262, discloses a solid-state image pickup apparatus with a vertical scanning circuit (see figure 9, element 45). By substituting a decoder for the vertical shift register 45 in figure 9, the arrangement is used as a line sensor that offers variable vertical range of image sensing (see column 8, lines 55-60).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Endo et al., US 5,965,872, in view of Uno,

Art Unit: 2615

US 5,619,262, to have the scanning circuit include a decoder in order to offer variable vertical range of image sensing.

**6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue, US 6,219,405, in view of Endo et al., US 5,965,872.**

Inoue, US 6,219, 405, discloses an image pickup apparatus comprising:

said solid-state image pickup element (see figure 3, element 4 and column 1, lines 32-34);

an optical system (see figure 3, element 3) for forming light into an image on said solid-state image pickup element (see column 1, lines 36-40); and

a signal processing circuit (see figure 3, element A) for processing an output signal from said solid-state image pickup element (see column 8, lines 5-35). The Inoue reference lacks the solid-state image pickup element defined in claim 1.

In regard to claim 14, Endo et al., US 5,965,872, discloses the solid-state pickup element of claim 1 as discussed earlier in the action. Endo teaches the pixels are arranged in a two-dimensional array divided into three blocks of three pixels each in order to simultaneously transfer outputs from the three pixels of a block simultaneously (see column 9, line 64 to column 10, line 4).

It would have be obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Inoue, US 6,219,405, in view of Endo et al., US 5,965,872, to have the image pickup apparatus as claim in claim 14 in order to simultaneously transfer the outputs of each pixel in a block.

*Allowable Subject Matter*

7. Claims 4-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art used in the previous rejections does not disclose the operation processing circuit as claimed in claims 4-13.

*Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following art discloses solid state image sensors with pixel blocks:

US 6,163,386,

US 6,657,662,

US 6,665,012,

US 6,759,641.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 703-305-8623. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on 703-308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gvs



TUAN HO  
PRIMARY EXAMINER